

THE INSTITUTE FOR ADVANCED STUDY

PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

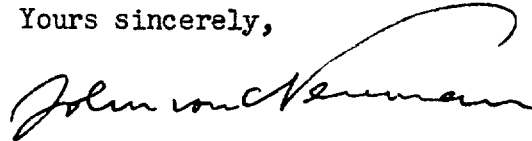
March 14, 1955

Dear Professor Lederberg:

I have done some work on the question of self-reproduction, but I would consider it very incomplete. It amounts to describing an automaton which has this property, but I think that the terms of the discussion and the methods introduced will not be particularly surprising to a geneticist.

I am writing up these considerations now in detail and finishing this will take some time. However, I published a sketch of this work in one of the contributions to the "Hixon Symposium", held at the California Institute of Technology in Pasadena, on September 20, 1948. (This is one of the articles in the volume on the proceedings of that colloquium. The volume is entitled "Cerebral Mechanisms in Behavior", L.A. Jeffres, editor, published by John Wiley, New York, 1951. The title of the article is, "The General and Logical Theory of Automata".) I have only three reprints of this paper left, but if you have any difficulty in getting hold of the publication, I will be glad to send you a reprint on loan. I would also be very interested to learn anything you would care to communicate about your own ideas on this subject.

Yours sincerely,



John von Neumann

JvNeg

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